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DATE MAILED: 12/17/2008

### NOTICE OF ALLOWANCE AND FEE(S) DUE

53067 7590 12/17/2008 STEPTOE & JOHNSON LLP 1330 CONNECTICUT AVE., NW WASHINGTON, DC 20036 EXAMINER
BEDTELYON, JOHN M
ART UNIT PAPER NUMBER
2874

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582.341	06/09/2006	Tomova Sugita	28951,1176	4982

TITLE OF INVENTION: OPTICAL ELEMENT, LASER LIGHT SOURCE, AND TWO-DIMENSIONAL IMAGE FORMING APPARATUS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/17/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	ed below or directed oth	ng the Patent, advance on nerwise in Block 1, by (	rders and notification of a) specifying a new co	of maintenance f rrespondence ad	es will be lress; and/o	mailed to the current or (b) indicating a sep	correspondence address as arate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
	7590 12/17 OHNSON LLP FICUT AVE., NW I, DC 20036	/2008	I S a t	hereby certify the tates Postal Serviddressed to the transmitted to the	Certificat at this Fee ice with su Mail Stop USPTO (5	te of Mailing or Trans (s) Transmittal is bein difficient postage for fir ISSUE FEE address 71) 273-2885, on the c	emission g deposited with the United st class mail in an envelope above, or being facsimile late indicated below.
			[				(Depositor's name)
			].				(Signature)
			l				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENT	OR	ATT	ORNEY DOCKET NO.	CONFIRMATION NO.
10/582,341 TITLE OF INVENTION	06/09/2006 OPTICAL ELEMENT	LASER LIGHT SOUR	Tomoya Sugita CE, AND TWO-DIMEN	ISIONAL IMAG	E FORMI	28951.1176 NG APPARATUS	4982
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DU	E PREV. PAID	ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	s	)	\$1810	03/17/2009
EXAM	INER	ART UNIT	CLASS-SUBCLASS	7			
BEDTELYC		2874	385-050000	_			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address i2 or more recent) attach	nge of Correspondence "Indication form ed. Use of a Customer A TO BE PRINTED ON		to 3 registered atively, ngle firm (havin or agent) and the attorneys or agen be printed.	as a mem names of s. If no na	ber a 2 up to me is 3	
(A) NAME OF ASSIG	GNEE		(B) RESIDENCE: (CI	TY and STATE	OR COUN	TRY)	oup entity  Government
4a. The following fee(s)  Issue Fee Publication Fee (N Advance Order	o small entity discount p		b. Payment of Fee(s): (I A check is enclose Payment by credit The Director is her overpayment, to D	d. card. Form PTO eby authorized to	2038 is at	ached.	
	s SMALL ENTITY state	is. See 37 CFR 1.27.				ITITY status. See 37 C	
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other that Office.	in the applicant;	registered	attorney or agent; or t	he assignee or other party in
Authorized Signature				Date			
Typed or printed name			Registration No.				
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but firginia 22313-1450. DC 13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain  1.14. This collection is r depending upon the in the Chief Information Of COMPLETED FORMS	or retain a benefi estimated to tak dividual case. A ficer, U.S. Paten TO THIS ADD	by the put 12 minute ny commer and Trade RESS. SEN	olic which is to file (an is to complete, including its on the amount of ti mark Office, U.S. Dep (ID TO: Commissioner	d by the USPTO to process) ag gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



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#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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			ART UNIT	PAPER NUMBER		
			2874			

DATE MAILED: 12/17/2008

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Application No. Applicant(s) 10/582.341 SUGITA ET AL. Notice of Allowability Examiner Art Unit JOHN M. BEDTELYON 2874 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the amendment and remarks submitted 10/20/2008. The allowed claim(s) is/are 8-19. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. T Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other . /Kevin S Wood/ Primary Examiner, Art Unit 2874

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Art Unit: 2874

## DETAILED ACTION

# Response to Amendment

This action is responsive to the amendment and remarks submitted 10/20/2008.
 Claims 8 and 13 are amended. No claims are added or canceled. Claims 8-19 are currently pending in the Application.

## Response to Arguments

Applicant's arguments, see page 6, filed 10/20/2008, with respect to the
objections and rejections of claims 8-19 have been fully considered and are persuasive.
 The rejections and objections of claims 8-19 have been withdrawn.

## Allowable Subject Matter

- Claims 8-19 are allowed.
- 4. The following is an examiner's statement of reasons for allowance: the prior art of record does not appear to anticipate or render obvious, in combination with the other claim limitations, wherein an optical path length L from a light input surface of the waveguides to a light output surface of the waveguides satisfies the following equation:  $L \geq W/tan(sin^{-1} (sin(\Theta/2)/n)), \text{ wherein W is a width of the waveguide, } n \text{ is a refractive index inside the waveguide, and } \Theta \text{ is a minimum beam spread angle of the semiconductor laser (see claims 8 and 13).}$

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Art Unit: 2874

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to JOHN M. BEDTELYON whose telephone number is

(571)270-1290. The examiner can normally be reached on Monday - Friday, 10:00am -

6:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Uyen-Chau Le can be reached on 571-272-2397. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JMB/

Examiner, Art Unit 2874

/Kevin S Wood/ Primary Examiner, Art Unit 2874